DOCUMENT RESUME

ED 260 570 EC 180 537

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TITLE The Role of Parent Knowledge and Support in the Development of Parent-Child Relationships within Very High Risk Families.
PUB DATE Apr 85
NOTE 19p.; Paper presented at Biennial Meeting of the Society for Research in Child Development (Toronto, Canada, April 25-28, 1985).
PUB TYPE Speeches/Conference Papers (150) -- Reports - Research/Technical (143)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Child Development; *High Risk Persons; Infants; Knowledge Level; *Low Income Groups; Mother Attitudes; *Parent Child Relationship; Social Support Groups

ABSTRACT

The study explored competent parenting within a group often thought to have difficulty in this regard (19 infants and their mothers in the very high risk category) and attempted to identify possible areas for intervention. Ss were urban, of low socioeconomic status, and also had at least one additional factor (such as parent with extreme emotional/coping problems or parent whose infant has significant developmental disabilities) that placed their development at high risk. Measures addressed social support, sense of emotional support, parent knowledge of child development, quality of the mothers' interactions with their babies, parents' perceptions of their infant, and infant development. The central hypothesis, that mothers who have adequate social support and are knowledgeable about child development would demonstrate a better relationship with their infants, was supported in part. Observed quality of the parent-infant interaction was better in the case of mothers who lived with a number of other adults and who were knowledgeable about child development. Women who reported symptoms of isolation and powerlessness tended to see their infants as fussy and difficult. (CL)

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ED260570

The Role of Parent Knowledge and Support in the Development of Parent-Child Relationships Within Very High Risk Families

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A poster summarizing this paper was presented at the 1985 biennial meeting of the Society for Research in Child Development, Toronto, Canada.

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We gratefully acknowledge the contribution of Lynda Sowbel, Thomas Keane, Patabi Seetharaman, and Bruce Greenwald who assisted in data collection and analyses. Computer services were provided by the University of Maryland Professional Schools Computer Center.

EC 180537

Researchers have recently expanded their efforts to better understand what contributes to a positive outcome among groups of infants who have been considered, statistically, to have a poor developmental prognosis. One particularly potent factor placing infants' development at high risk is low socioeconomic status. Children from disadvantaged populations typically perform less well on a variety of dimensions than do their middle-class counterparts (Bee, Van Egeren, Streissguth, Nyman, & Leckie, 1969; Broman, Nichols, & Kennedy, 1975; Farran, & Haskins, 1980; Farran, Haskins, & Gallagher, 1980; Hess, & Shipman, 1965; Sameroff, & Chandler, 1975; Sameroff, Seifer, & Elias, 1982; Sameroff, Seifer, & Zax, 1982; Vaughn, Deinard, & Egeland, 1980; Zegiob, & Forehand, 1975). Yet the process by which these differences occur is not entirely clear. By examining a relatively homogeneous group of mothers and infants from low socioeconomic families, we sought to further differentiate significant aspects of the caregiving environment which might affect these infants' development. A group of multi-problem families was selected in order to focus on parent-child relationships within an especially high-risk population. Our aim was to explore competent parenting within a group often thought to have difficulty in this regard and to identify possible areas for intervention. Specifically, we were interested in mothers' perceptions of their babies and the quality of the mothers' interactions with their babies as intermediate indices of developmental outcome. Two potentially influential variables were examined. One was the mothers' cognitive knowledge base and the other was the social support available to the mother. We have ample reason to hypothesize that within a group of multi-problem families, those mothers who are knowledgeable about child development and have a strong social support network

will have more positive perceptions of their infants and higher quality interactions with them (Cochran, & Brassard, 1979; Elster, McAnarney, & Lamb, 1983; Field, Widmayer, Stringer, & Ignatoff, 1980; Greenspan, 1982; Gregg, 1973; Ramey, & Brownlee, 1981; Slaughter, 1983).

A number of authors suggest that difficulties in the parent-infant relationship may be due in part to parents' limited knowledge about child development and their inadequate expectations for their infants (Elster et al, 1983; Field et al, 1980; MacPhee, 1982; Ross, 1983). Within both high and low-risk groups of parents, parent education programs have been effective in increasing knowledge and improving parent-infant interaction (Casey, & Whitt, 1980; Field et al, 1980; Ross, 1983; Slaughter, 1983). As child development information can be provided to families in a reasonably cost-effective way (e.g., Casey, & Whitt, 1980), it becomes especially important to investigate the role of parent knowledge within multi-problem families. Middle-class parents more so than lower-class parents typically seek child development information from books, magazines, and pediatricians (Clarke-Stewart, 1978; Ninio, 1979). Perhaps within low socioeconomic groups, the extended family provides the necessary knowledge base as was the case for most families before cultural shifts promoted the wide-spread reliance on mass media as the central source of guidance (Clarke - Stewart, 1978; Slaughter, 1983).

In addition to supplying parents with information about development, extended families also provide a source of practical caregiving and emotional support. These kinds of support may be available to mothers in a number of ways, perhaps the critical variable being the degree to which a mother's personal social network directly or indirectly influences her caregiving

(Cochran, & Brassard, 1979). While there is some evidence that social support systems may be stressful in making demands on parents and contributing unwanted advice (Hobbs, & Cole, 1976; Belle, 1981), most research points to social support as moderating life stress (Cobb, 1976; Crnic, Greenberg, Ragozin, Robinson, & Basham, 1983; Powell, 1979) and associated with better parent-child interaction (Hetherington, Cox, & Cox, 1976; Pascoe, Loda, Jeffries, & Earp, 1981).

Social support is generally conceived of as the help and social contacts available to the parent. However, it may be that it is the mother's affective sense of support that is most important in influencing her ability to provide her baby with positive emotional experiences since mother's emotional state may be directly communicated to the infant (Cohn, & Tronick, 1983). Having the feeling of personal mastery is correlated with actual effectiveness (Lefcourt, 1976; Tyler, 1978). Thus, it is expected that mothers who report feeling powerless and isolated might have more negative relationships with their infants than mothers with a greater sense of control and emotional support.

In the present study, three facets of the parent-infant relationship were measured: (1) the mother's report of the infant's fussiness, (2) her view of her infant's overall development, and (3) observers' ratings of the quality of the parent-infant interaction. A mother's perception of her baby is considered a reflection of the mother-infant relationship (Bates, Freeland, & Lounsbury, 1979; Sameroff, et al, 1982) with long-term consequences for development (Broussard, & Hartner, 1970; Thomas, Chess, & Birch, 1968). The quality of the mother-infant interaction has been shown to be a determinant of psychosocial competence and intellectual outcome (Ramey, Farran, & Campbell,

1979). In studies incorporating heterogeneous samples, low socioeconomic, high-risk parents are found to report more negative perceptions of their infants and to demonstrate poorer quality interactions with their infants than middle-class, low-risk parents (Farran, & Haskins, 1980; Sameroff, & Chandler, 1975; Sameroff, et all, 1982; Vaughn, et al, 1980). The present study explores some of the determinants of these repeatedly discouraging findings through identification of relationships between parental knowledge and support and the parent-child relationship. Our goal is to provide a guide to potential, fruitful areas for primary prevention of infant morbidity (Greenspan, 1982).

METHOD

Sample selection and subject characteristics

Subjects were patients under 24 months of age and their mothers attending a pediatric clinic for low-income, inner-city families in Baltimore City. Families with specified risk factors in addition to their low socioeconomic status were identified by the medical staff. Of the 66 families who met the "very high-risk" criteria within the two month time frame in which subjects were sought, the first 35 were offered appointments to participate in the study and to receive an intervention (their choice of a parent group and/or an individualized parent education-based program by a social worker and nurse team). Twenty mothers and their infants kept an initial intake appointment. Nineteen of these 20 families comprised the sample (one infant over the 24 month old age limit was inadvertently appointed, but not included in the analyses). The "very high-risk" criteria for selection were the following: parent with extreme emotional/coping problems (e.g., diagnosed psychiatric disturbance, alcohol or drug abuse), parent with another child who had been

abused, in foster care, or had a history of non-organic failure-to-thrive, parent with a pattern of deliquent medical care for the child (e.g., many missed appointments, delayed immunizations), parent who displays highly inappropriate expectations for the infant (such as saying the infant should not cry following painful medical procedures), parent who was less than 17 when her first child was born and has several young children, parent whose infant has significant developmental difficulties (e.g., history of hospitalization in a neonatal intensive care unit for more than three days, congenital malformations, delayed development, severe sleeping or feeding problems). Thus, in every case, subjects were low socioeconomic status and also had at least one additional factor which placed their developmental morbidity at high risk. Sixty-eight percent were black, 53% were males, and 37% were premature. The mothers averaged 21.8 years of age at the birth of their first child (S.D. = 6.9, range = 16 to 44). The infants averaged 7.2 months of age (S.D. = 5.8, range = 1 to 18).

Instruments

The several instruments employed in the study are described as follows:

1. Social Support

The Maternal Social Support Index (Pascoe, et al, 1981) was modified slightly to eliminate bias in questions towards two-parent families. The instrument measures practical help available to the mother, involvement in the community, and availability of supportive relationships. The authors successfully demonstrated the usefulness of this instrument in assessing mothers' social support networks. The Pascoe et al, 1981, scoring procedure was used. We also asked mothers to tell us how many adults lived at home with them and how many people helped care for the baby.

2. Emotional support

Two indices of a person's sense of emotional support were assessed, powerlessness and isolation, using the Dean's Alienation scales (Dean, 1969). Some of the items were re-written preserving the content, but simplifying the language. The items are constructed using a Likert scale and scored accordingly. The powerlessness and isolation scales appear to measure a person's feeling of social isolation, life dissatisfaction, and lack of self-respect (Simmons, 1969), symptoms of inadequate emotional support.

3. Knowledge of child development

Two measures of parent knowledge of child development were employed: general knowledge based on an adaptation of the Knowledge of Infant Development Inventory -- KIDI (MacPhee, 1982) and knowledge of developmental milestones. The KIDI is a new, carefully developed instrument with promising reliability and validity findings. In the present study, the items reflecting sensitivity to infant needs and infant effects on the parent were included and, again, some of the language was revised to make items more comprehensible. To test knowledge of developmental milestones, a multiple choice test was given asking when children are able to smile at parents, repeat the same sound over and over like ba-ba-ba-ba, put two words together, sit up without leaning on anything, walk without help, make wants known by gesturing, roll over by themselves, and use a spoon to feed themselves. Each measure of parent knowledge yielded a score based on the number of questions answered correctly.

4. Rating of parent-infant interaction

Two independent observers, each in a different setting, rated the quality of the mother's interaction with her baby. A global 7-point rating scale was employed (1 = low quality of interaction, 7 = high quality of interaction). Ainsworth's (1973) coding system was used to define and guide the

observers' ratings. The ratings were made incidentally as each observer interviewed the mother with her infant in successive sessions. The ratings of the two observers were averaged for use in the data analyses. The percent agreement within one point between observers was 85.

5. Parent perception of baby

First, parents were asked how fussy/difficult they found their infant using items from the first factor (Factor I: Fussy/Difficult) of the Infant Characteristics Questionnaire -- ICQ (Bates, et al, 1979). There are different versions of the ICQ depending on the child's age with the validity of the Fussy/Difficult factor strongly supported in each one. The age-appropriate items of the Fussy/Difficult factor were administered and the ratings, which are made on 7 point scales, averaged to produce a single score.

Second, the mothers were asked to say how their infants were progressing as compared with other infants of the same age in comprehension, communication, gross motor, fine motor, social behavior, and self-help skills. Each area was explained and exemplified and then the mother rated her baby as average, above or below average, or very much above or below average. The mother's ratings on the different areas were averaged for the analyses.

6. Infant development

The Denver Developmental Screening Test (Frankenburg, & Dodds, 1967) was administered to check the developmental status of the infants. All subjects passed the Denver screening using the traditional criteria. In addition, a score was derived using a stricter set of criteria than those suggested by the test authors. Subjects failing an item which 75% (instead of the suggested 90%) of infants at a given age are said to perform were considered to have failed that item. If there were two such failures in a domain, the domain was considered a problem area. Thus, a score was derived consisting of the number of problem areas.

Procedure

Subjects were introduced to the study and data collected at an initial intake appointment. Intervention services by social workers and nurses were offered but were not contingent upon participation in the research. All families who kept the intake appointment were willing to participate in the study. Data collection was performed by a psychologist who administered the Denver and measures of parent knowledge and parent perception of the infant, and by a social worker who administered the measures of social and emotional support. Both the psychologist and social worker observed the mother-infant interaction. All measures were read aloud since our experience was that many of the mothers have difficulty reading and responding to paper-and-pencil tests.

RESULTS

Preliminary analyses revealed no effects of the infant's age, sex, gestational status, race, developmental status (using the strict Denver criteria described earlier), nor mother's age at the birth of her first child. Therefore, subsequent data analyses were conducted collapsing across these dimensions.

The Maternal Social Support Index (MSSI) was largely a reflection of the number of adults living in the home ($r(17) = .66$, $p < .01$) and of the availability of caretakers for the infant ($r(17) = .54$, $p < .05$). These two aspects of social support, adults in the home and infant caretakers, were unrelated ($r(17) = .40$, $p > .05$). Having good social support meant having a number of people available to perform a variety of helpful roles. The sample as a whole generally did have adequate social support available (mean MSSI score = 10.32 of a possible 19, S.D. = 3.32). There were an average of 3.47 (S.D. = 1.81) other adults living in the home and there were an average of 2.79 (S.D. = 1.13) other caretakers for the infant.

An emotional support score was derived by adding the standard score conversions of the Isolation and Powerlessness scores from the Dean's Scales. Moderate levels of powerlessness and isolation were reported by this group of mothers overall. Women who reported a strong sense of emotional support were not necessarily those with extensive social support ($r(17) = -.07$, $p > .05$).

The third dimension of the caregiving environment which was examined was the mother's knowledge of child development. These mothers were fairly knowledgeable about child development issues (mean = 19.37 out of a possible 26, S.D. = 2.81) but not as familiar with specific developmental milestones (mean = 3.11 out of a possible 8, S.D. = 1.37). Knowledge of child development was independent of the availability of social or emotional support.

Examination of the aspects of the parent-child relationship which were studied suggested that the experimental sample was relatively competent as a group. The infants were perceived as slightly less fussy/difficult than most babies (mean = 3.38, S.D. = .95, 4 is average) and seen as developing at a slightly better than average rate (mean = 3.43, S.D. = .66, 3 is average). The observers rated the group as displaying somewhat higher quality interactions than average (mean = 4.78, S.D. = 1.07, 4 is average). The three aspects of the parent-child relationship were uncorrelated with one another.

The main analyses examining the correlations between dimensions of the caregiving environment and aspects of the parent-child relationship are presented in Table 1. Multiple regression analyses using the knowledge and support variables as predictors of the parent-infant relationship did not yield significant results beyond the single-level product-moment correlations. Parents who reported that their infants were particularly fussy and difficult were likely to report indices of powerlessness and isolation but had varying

Insert Table 1 about here

degrees of social support and knowledge about child development. These mothers lacking sufficient emotional support did not necessarily exhibit a poor quality interaction with the infant nor an unrealistic view of the infant's development. The parents likely to have a negative view of the infant were those who made use of a large number of other people to help care for their infant. On the other hand, the more adults living in the home with the mother, the better was the quality of the parent-infant interaction. Mothers who were knowledgeable about child development also were observed to have an overall better quality interaction with their infants than those mothers with a more limited knowledge base.

DISCUSSION

The central hypothesis, that within a group of high-risk, multi-problem families, mothers who have adequate social support and who are knowledgeable about child development would demonstrate a better relationship with their infants, was supported in part. The observed quality of the parent-infant interaction was better in the case of mothers who lived with a number of other adults, perhaps due to the generalized social support they provided or through modeling. Thus, despite the dangers of overcrowding, mothers and infants seemed to benefit from the availability of other adults living in the home. Better quality interactions also were observed involving mothers who were knowledgeable about child development. However, it is possible that women who convey their general knowledge about child development either directly or indirectly are rated more highly when interacting with their infants. Still, even this kind of "halo" effect is important since it suggests that it may benefit a mother to present herself publically in a socially desirable way.

Women who had a number of adults living in their home were not necessarily the ones making use of a large number of people to take care of the infant. Infants who were cared for by a number of other adults were viewed more negatively by their mothers. These mothers did not seem to know their infants as well as mothers who selected from among a smaller number of people to babysit.

The results of the present study are consistent with those of other research (c.f., Cochran, & Brassard, 1979) demonstrating that social support is an important aspect of the caregiving environment. However, even with support systems in place, the psychological experience of the mother may be one of feeling isolated and powerless. Furthermore, women who reported symptoms of isolation and powerlessness tended to see their infants as fussy and difficult. Whether their despair produced a fussy baby or having a fussy baby produced their despair, or both, the implications are that the psychological experience of a mother may play a central role in determining parenting skills (Belsky, 1984).

One striking result of the study was the degree of competence exhibited by this very high risk group of mothers. It is encouraging to know that, if the effort is made, disadvantaged parents and infants reported by medical staff as having additional serious risk factors can be identified early before obvious problems are present. There is no way to know about the accuracy of prediction based on our selection criteria, but some guidelines for prevention are suggested and bear more extensive study. Interventions which address the psychological resources of the parent and offer access to a number of other adults are likely to have some impact on the parent-child relationship. Perhaps Diane Slaughter's (1983) finding that parent groups were more beneficial

than an in-home toy demonstration in improving parenting skills arose because the opportunities for social and emotional support were more directly available in the group. In the context of increasing mother's social and emotional support, some teaching of child development may at the very least improve a mother's social presentation and might promote better interactions with the infant.

Experimental samples using low-income, high-risk families are rare, largely due to noncompliance or low accessibility. Even in the urban pediatric setting where this population is over-represented, we found that a great deal of outreach, re-appointments, and reading paper-and-pencil measures was necessary. Yet if primary prevention programs are to be offered to this needy population, then the effort is warranted. It is not appropriate to assume that findings which arise from middle-class, low-risk samples or from the differences beween middle and lower-class groups are applicable to a better understanding of the processes of development of the parent-child relationship within disadvantaged families. Nor can adequate interventions be designed without this knowledge. Although our sample size was small, some important questions have been answered even if more have been raised.

REFERENCES

Ainsworth, M.D.S. (1973) System for rating maternal care behaviors. In Boyer, E.G., Simon, A., & Karafin, G. (Eds.), Measures of maturation: An anthology of early childhood observation instruments. Philadelphia: Research for Better Schools, 67-172.

Broussard, E.R., & Hartner, M.S. (1970) Maternal perception of the neonate as related to development. Child Psychiatry and Human Development, 1, 16-25.

Bates, J.E., Freeland, C.A.B., & Lounsbury, M.L. (1979) Measurement of infant difficultness. Child Development, 50, 794-803.

Bee, H.L., Van Egeren, L.F., Streissguth, A.P., Nyman, B., & Leckie, M.S., (1969) Social class differences in maternal teaching strategies and speech patterns. Developmental Psychology, 1 (6), 726-734.

Belle, D. (1981) Stress and coping in families with young children. Paper presented at the biennial meeting of the Society for Research in Child Development. Boston.

Belsky, J. (1984) The determinants of parenting: A process model. Child Development, 55, 83-96.

Broman, S., Nichols, P., & Kennedy, W. (1975) Preschool I.Q.: Prenatal and Early Developmental Correlates. New York: Halsted, 1975.

Casey, P.H., & Whitt, J.K. (1980) Effect of the pediatrician on the mother-infant relationship. Pediatrics, 65 (4), 815-820.

Clarke-Stewart, K.A. (1978) Popular primers for parents. American Psychologist, 33, 359-369.

Cobb, S. (1976) Social support as a moderator of life stress. Psychosomatic Medicine, 38. 300-314.

Cochran, M.M., & Brassard, J.A. (1979) Child development and personal social networks. Child Development, 50, 601-616.

Cohn, J.F., & Tronick, E.Z. (1983) Three-month-old infants' reactions to simulated maternal depression. Child Development, 54, 185-193.

Crnic, K.A., Greenberg, M.T., Ragozin, A.S., Robinson, N.M., & Basham, R.B. (1983) Effects of stress and social support on mothers and premature and full-term infants. Child Development, 54, 209-217.

Dean, D.G. (1969) Alienation: Its meaning and measurement. In D.G. Dean (Ed.) (1969) Dynamic social psychology: Toward appreciation and replication. New York: Random House.

Elster, A.B., McAnarney, E.R., & Lamb, M.E. (1983) Parental behavior of adolescent mothers. Pediatrics, 71 (4), 494-503.

Farran, D.C., & Haskins, R. (1980) Reciprocal influence in the social interactions of mothers and three-year-old children from different socioeconomic backgrounds. Child Development, 51, 780-791.

Farran, D.C., Haskins, R., & Gallagher, J.J., (1980) Poverty and mental retardation: A search for explanations. In J.J. Gallagher (Ed.) New Directions for Exceptional Children, Vol. 1. San Francisco; Jossey-Bass.

Field, T.M., Widmayer, S.M., Stringer, S., & Ignatoff, E. (1980) Teenage, lower-class, black mothers and their pre-term infants: An intervention and developmental follow-up. Child Development, 51, 426-436.

Frankenburg, W.K., & Dodds, J.B. (1967) The Denver Developmental Screening Test. Journal of Pediatrics, 71, 181-191.

Greenspan, S.I. (1982) Developmental morbidity in infants in multi-risk-factor families. Public Health Reports, 97 (1), 16-23.

Gregg, G.S. (1973) Clinical experience with efforts to define individual differences in temperament. In J.C. Westman (Ed.), Individual Differences in Children. New York: Wiley and Sons, Inc.,

Hess, R.D., & Shipman, V.C. (1965) Early experience and the socialization of cognitive modes in children. Child Development, 36, 869-886.

Hetherington, E.M., Cox, M., & Cox, R. (1976) Divorced fathers. Family Coordinator, 25, 417-428.

Hobbs, D.F., & Cole, S.P. (1976) Transition to parenthood: A decade replication. Journal of Marriage and the Family, 38, 723-731.

Lefcourt, H.M. (1976) Locus of control: Current trends in theory and research. Hillsdale, N.J.: Academic Press.

MacPhee, D. (1982) Knowledge of infant development inventory, draft manual unpublished, University of North Carolina.

Ninio, A. (1979) The naive theory of the infant and other maternal attitudes in Israel. Child Development, 50, 976-980.

Pascoe, J.M., Loda, F.A., Jeffries, V., & Earp, J.A. (1981) The association between mothers' social support and provision of stimulation to their children. Developmental and Behavioral Pediatrics, 2 (1), 15-19.

Powell, D.R. (1979) Family-environment relations and early child-rearing: The role of social networks and neighborhoods. Journal of Research and Development in Education, 13 (1), 1-11.

Ramey, C.T., & Brownlee, J.R. (1981) Improving the identification of high-risk infants. American Journal of Mental Deficiency, 85 (5), 504-511.

Ramey, C.T., Farran, D.C., & Campbell, F.A. (1979) Predicting I.Q. from mother-infant interaction. Child Development, 50, 804-814.

Ross, G.S. (1983) Home intervention for premature infants of low-income families. Paper presented at the biennial meeting of the Society for Research in Child Development, Detroit.

Sameroff, A.J., & Chandler, M.J. (1975) Reproductive risk and the continuum of caretaking casualty. In F.D. Horowitz, M. Hetherington, S. Scarr-Salapetek, & G. Seigel (Eds.), Review of Child Development Research, Volume 4. London: University of Chicago Press, pp 187-244.

Sameroff, A.J., Seifer, R., & Elias, P.K. (1982) Sociocultural variability in infant temperament ratings. Child Development, 53, 164-173.

Sameroff, A.J., Seifer, R., & Zax, M. (1982) Early development of children at risk for emotional disorder. Monographs of the Society for Research in Child Development, 47 (7), 1-82.

Simmons, J.L. (1969) Some intercorrelations among "alienation" measures. In D.G. Dean (Ed.) Dynamic Social Psychology Toward Appreciation and Replication. New York: Random House, 175-178.

Slaughter, D.T. (1983) Early intervention and its effects on maternal and child development. Monographs of the Society for Research in Child Development, 48 (4), Serial No. 202, 1-91.

Thomas, A., Chess, S., & Birch, H.G. (1968) Temperament and behavior disorders in children. New York: New York University Press.

Tyler, F.B. (1978) Individual psychosocial competence: A personality configuration. Educational and Psychological Measurement, 38, 309-323.

Vaughn, B., Deinard, A., & Egeland, B. (1980) Measuring temperament in pediatric practice. Journal of Pediatrics, 96 (3), 510-514.

Zegiob, L., & Forehand, R. (1975) Maternal interactive behavior as a function of race, socioeconomic status, and sex of the child. Child Development, 46, 564-568.

Table 1

Relationships between parent knowledge and support and aspects of the parent-child relationship.

	Parent perception of infant		Observed quality of parent-infant interaction
	a. Fussiness	Overall b. development	
Social Support			
MSSI	.05	-.38	.21
Number of adults in the home	.15	-.17	.51*
Number of infant caregivers	-.04	-.50*	.17
Emotional Support			
Powerlessness & isolation	.55*	.08	-.34
Knowledge of Child Development			
General knowledge	-.12	-.02	.64**
Knowledge of milestones	-.17	.32	-.30

* $p < .05$

** $p < .01$